REQUEST FOR ACTION (RFA) RESPONSE

GLAST LAT Project
Calorimeter Peer Review **17 – 18 March 2003**

Action Item:	CAL – 012
Presentation Section:	Thermal
Submitted by:	Tom McCarthy

Request: Emissivity parameter - Consider clarifying emissivity parameter with respect to coating it applies to.

Reason / Comment:

Response: 2 Oct 2003

The attached view graph, which was presented at the CAL Peer Review, has been updated to address the request of this RFA. The surface treatment or coating has been added to the corresponding emissivity parameter summarized in the view graph.

Thermal Analysis – Assumptions

- **Thermal Environment Design Parameters**

	Tracker (Al Foil)	Grid	TEM
Temperature (°C)	18.5	18	34
Emissivity	0.04	0.75	0.75
Surface Coating	Aluminum Foil	Black Anodize	Black Anodize

Hot Case

	Tracker	Grid	TEM
Temperature (°C)	-17	-15	-11
Emissivity	0.04	0.9	0.9
Surface Coating	Aluminum Foil	Black Anodize	Black Anodize

Cold Case

Conductive coupling	Conductances (W/K)
Grid/base plate conductance (for each side: 4 sides)	2.67
TEM/base plate conductance (for each fixture: 4 fixtures)	0.03

- **Optical Properties**
  - **6 CAL Aluminum Faces:** Alodine 1200 Emissivity = 0.1